



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

SOUŘADNICOVÉ SYSTÉMY ONLINE

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Tomas.Pohanka@upol.cz

St^{at}Gis Team



O čem budu dnes mluvit

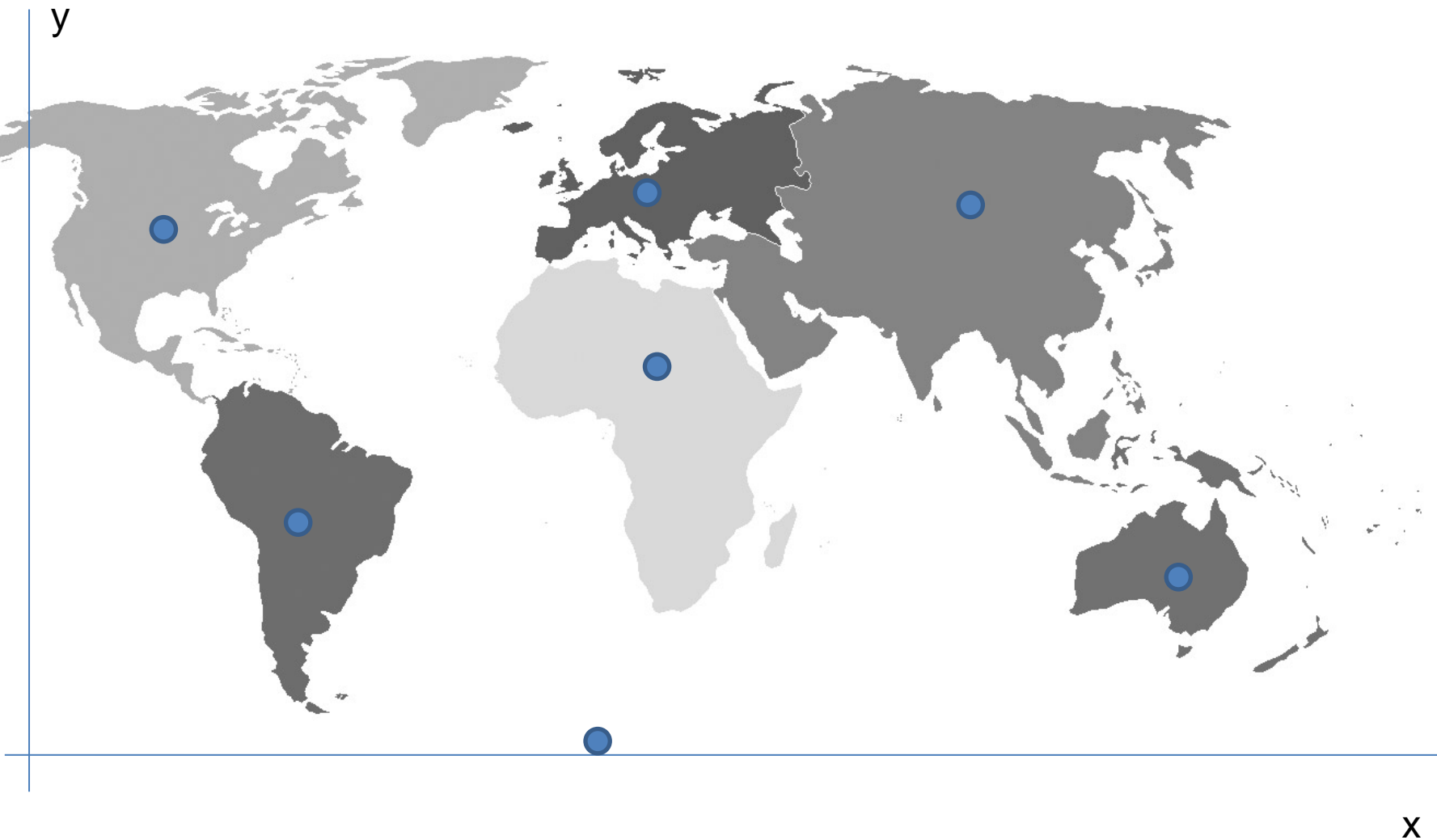
Spatial Reference

EPSG Geodetic Parameter Registry

GeoRepository

EPSG.io



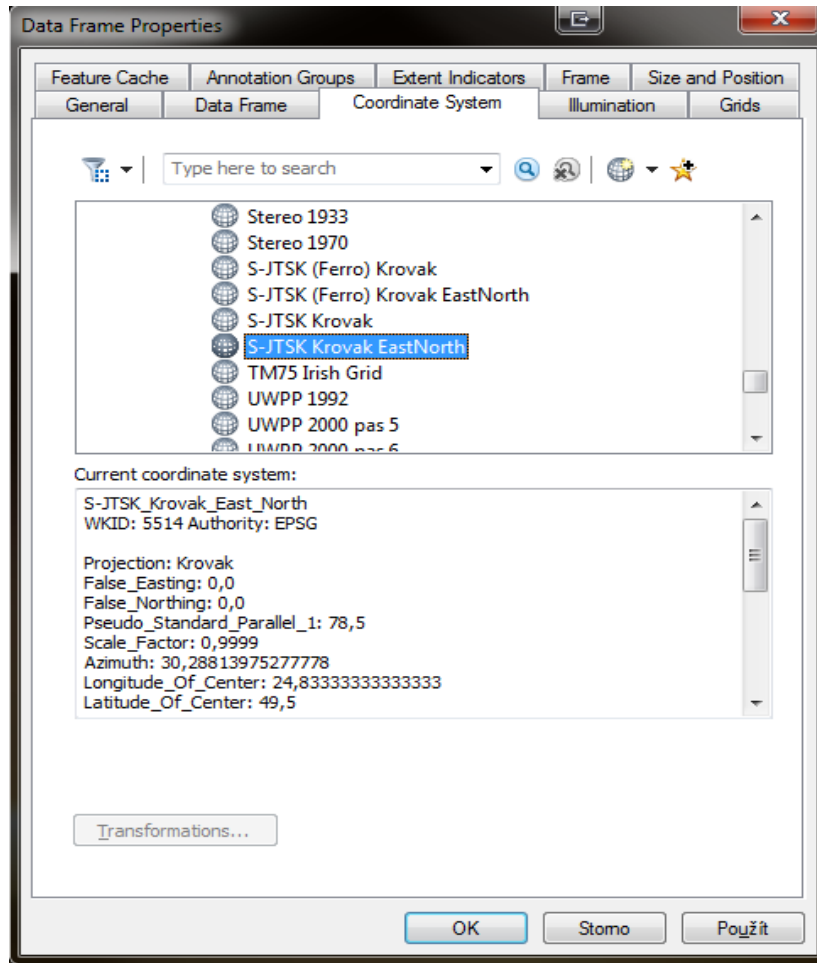


EPSG databáze

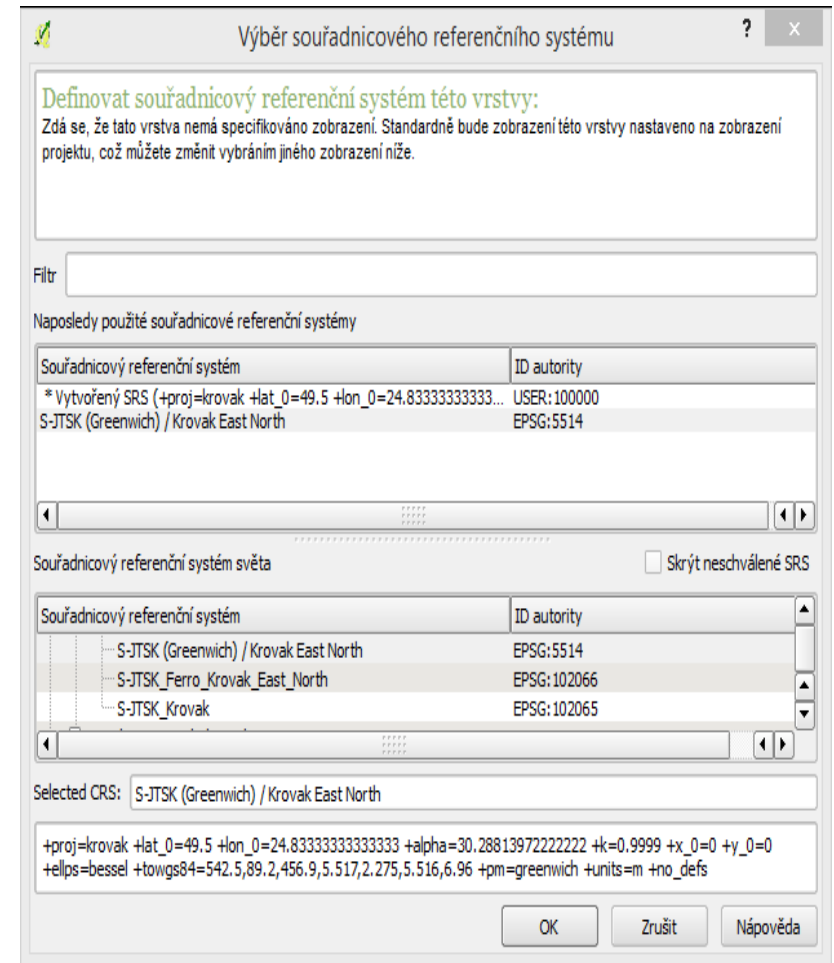
European Petroleum Survey Group



ArcGIS



QGIS



SPATIAL REFERENCE

<http://spatialreference.org>



Find your references in any number of formats!

- See Existing EPSG Codes: [4326](#), [2805](#)
- [Upload your own Projection as WKT, proj4, etc.](#)
- Browse a list:
 - 4362 [EPSG](#) references
 - 447 [ESRI](#) references
 - 2380 [IAU2000](#) references
 - 1578 [spatialreference.org](#) references

Recently Viewed

- [WGS 84 / SCAR IMW SV51-60](#), 1034 views, 0 comments
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- [NAD 1983 StatePlane New York East FIPS 3101 Feet](#), 977 views, 0 comments
- [NAD 1983 HARN StatePlane Illinois West FIPS 1202](#), 704 views, 0 comments
- [WGS 84 \(3D DMH\)](#), 395 views, 0 comments

Recent Uploads

- [SR-ORG:8082: NAD 1983 HARN WIS](#)
- [SR-ORG:8081: test](#)
- [SR-ORG:8080: landsat](#)
- [SR-ORG:8079: 500bin](#)
- [SR-ORG:8078: Indian\(Thailand\)](#)

Input Coordinates: 15.472962, 49.753923125321
Output Coordinates: -672724.374705, -1089566.336445

SR-ORG:6634

Czech S-JTSK GIS: ESRI:102067 ([Google it](#))

S-JTSK_Krovak_East_North: Used in ArcGIS and other ESRI products. All coordinates are negative (with minus sign). Transformation is defined for the area of Czech Republic. Bessel ellipsoid, Greenwich meridian, Krovak projection. Definition and details: <http://help.maptiler.org/coordinates/europe/cz>

- **WGS84 Bounds:** 10.1556, 47.2726, 20.7903, 52.2353
- **Projected Bounds:** -1104196.9818, -1398626.3325, -276590.4283, -758318.1159

- [Well Known Text as HTML](#)
- [Human-Readable OGC WKT](#)
- [Proj4](#)
- [OGC WKT](#)
- [JSON](#)
- [GML](#)
- [ESRI WKT](#)
- [.PRJ File](#)
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- [Mapnik XML](#) | [Python](#)
- [GeoServer](#)
- [PostGIS spatial_ref_sys INSERT statement](#)
- [Proj4js format](#)

<http://spatialreference.org/ref/sr-org/6634/>

EPSG GEODETIC PARAMETER REGISTRY

<http://epsg-registry.org>





[query by filter](#)

[retrieve by code](#)

Code:

[?](#)

Note: Codes are only unique within a type, therefore multiple codes may be retrieved.

Search Results (1 - 1 of 1 possible results)

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<<first <prev | page of 1 | next> last>>

Report	Name	Code	Type	Status	Area Description	Remarks / Description	
<input type="checkbox"/>	S-JTSK / Krovak East North	EPSG::5514	ProjectedCRS	Valid	Czech Republic; Slovakia.	Greenwich-based alternative to S-JTSK (Ferro) / Krovak East North, CRS code 5221.	view

<<first <prev | page of 1 | next> last>>

<http://epsg-registry.org>

[Back](#) to IOGP's Geomatics area
 Developed by: [Galdos Systems Inc.](#)
 Version: 2.4.11



query by filter

retrieve by code

Code:

Note: Codes are only unique within a type, therefore multiple codes may be retrieved.

ProjectedCRS [S-JTSK / Krovak East North]

[metadata](#)

Code: [EPSG::5514](#)

Name: [S-JTSK / Krovak East North](#)

Aliases

Area of Use [Europe - Czechoslovakia]

[metadata](#)

Base Geodetic CRS [S-JTSK]

[metadata](#)

Code: [EPSG::4156](#)

Name: [S-JTSK](#)

Type: [geographic 2D](#)

Area of Use [Europe - Czechoslovakia]

[metadata](#)

Geodetic Datum [System Jednotne Trigonometricke Site Katastralni]

[metadata](#)

Code: [EPSG::6156](#)

Name: [System Jednotne Trigonometricke Site Katastralni](#)

Aliases

Anchor Definition: Modification of Austrian MGI datum, code 6312.

Area of Use [Europe - Czechoslovakia]

[metadata](#)

Ellipsoid [Bessel 1841]

[metadata](#)

Code: [EPSG::7004](#)

Name: [Bessel 1841](#)

Shape: Ellipsoid

Semi-Major Axis: 6377397.155 [metre](#)

Inverse Flattening: 299.1528128 [unity](#)

Prime Meridian [Greenwich]

[metadata](#)

S-JTSK / Krovak East North[VALID]

Remarks: Greenwich-based alternative to S-JTSK (Ferro) / Krovak East North, CRS code 5221.

Scope: GIS. Due to distortions in survey network introduced after the initial realisation the projection has an inaccuracy of several decimetres.

Information Source: Land Survey Office (ZU), Prague. www.cuzk.cz/zu

Data Source: OGP

Revision Date: 2011-05-09

Change ID: [EPSG::2011.039](#)



GEOREPOSITORY

<http://georepository.com>



Full Data Search

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Map Search



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GeoRepository - Geodetic Parameter Repository

What is GeoRepository?

GeoRepository™ is a powerful web application and tool for searching and displaying geodetic parameters from a range of data sources and authorities. The underlying database is based on an extendible version of the EPSG dataset and is kept up to date with each EPSG release. All parameters available in the GeoRepository (including custom user records) can be used in geodetic calculations with a high precision *Geodetic Calculator*.

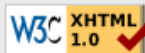
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<http://georepository.com>

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S-JTSK / Krovak East North



Projected CRS used in Europe - Czechoslovakia

S-JTSK / Krovak East North is a projected CRS last revised on 05/09/2011 and is suitable for use in Czech Republic; Slovakia. S-JTSK / Krovak East North uses the S-JTSK geographic 2D CRS as its base CRS and the Krovak East North (Greenwich) (Krovak (North Orientated)) as its projection. S-JTSK / Krovak East North is a CRS for GIS. Due to distortions in survey network introduced after the initial realisation the projection has an inaccuracy of several decimetres. It was defined by information from Land Survey Office (ZU), Prague. www.cuzk.cz/zu. Greenwich-based alternative to S-JTSK (Ferro) / Krovak East North, CRS code 5221.

Projected CRS Details

NAME:	S-JTSK / Krovak East North
CODE:	5514
CRS TYPE:	projected
AREA OF USE:	Europe - Czechoslovakia
COORDINATE SYSTEM:	Cartesian 2D CS. Axes: easting, northing (X,Y). Orientations: east, north. UoM: m.
BASE GEOGRAPHIC CRS:	S-JTSK
PROJECTION:	Krovak East North (Greenwich)

META DATA

REMARKS: Greenwich-based alternative to S-JTSK (Ferro) / Krovak East North, CRS code 5221.

http://georepository.com/crs_5514/S-JTSK-Krovak-East-North.html





KLOKAN TECHNOLOGIES

EPSG.IO

<http://epsg.io>

Find a coordinate system and get position on a map.

Country, code or name of a coordinate system

SEARCH



World coordinate systems

- WGS84 - World Geodetic System 1984, used in GPS
- Spherical Mercator, Google Maps Projection, OpenStreetMap, Bing
- UTM - Universal Transverse Mercator
- ETRS - European Terrestrial Reference System

Europe coordinate systems

- United Kingdom
- France
- Czech Republic
- Germany
- [Netherlands](#)
- Switzerland

Other coordinate systems

- Brazil
- New Zealand
- Australia

<http://epsg.io>

EPSG:5514

Projected coordinate system



S-JTSK / Krovak East North -- SJTSK

Available transformations:

- Czech Republic., accuracy 1.0 m, code 1623 [7]
- Czech Republic., accuracy 1.0 m, code 5239 [7]
- Czech Republic; Slovakia., accuracy 6.0 m, code 15965 (default) [3]
- Slovakia., accuracy 1.0 m, code 4836 [7]

Show deprecated transformations

Attributes

Selected transformation

Czech Republic; Slovakia.
code 15965

Accuracy 6.0 m (default)
3 parameters

[Coordinates on a map](#)

Method: Geocentric translations (geog2D domain)

Remarks: Derived at 6 stations.

Information source: U.S. National Imagery and Mapping Agency TR8350.2 revision of October 1997; http://earth-info.nga.mil/GandG/tr8350/tr8350_2.html

Revision date: 2007-11-01

Covered area



Center coordinates
-544006.67 -1144002.81

Projected bounds:
-951313.86 -1275181.81
-159398.12 -984126.34

WGS84 bounds:
12.09 47.74
22.56 51.05

<http://epsg.io/5514>

Unit: metre
Geodetic CRS: S-JTSK
Datum: System Jednotne Trigonometricke Site Katastralni
Ellipsoid: Bessel 1841
Prime meridian: Greenwich
Data source: OGP
Information source: Land Survey Office (ZU), Prague. www.cuzk.cz/zu
Revision date: 2011-05-09

Scope: GIS. Due to distortions in survey network introduced after the initial realisation the projection has an inaccuracy of several decimetres.
Remarks: Greenwich-based alternative to S-JTSK (Ferro) / Krovak East North, CRS code 5221.
Method: Geocentric translations (geog2D domain)
Area of use: Czech Republic; Slovakia.
Coordinate system: Cartesian 2D CS. Axes: easting, northing (X,Y). Orientations: east, north. UoM: m.

Czech Republic; Slovakia.

Export

Definition: Well Known Text (WKT)

Open

Copy URL

Copy TEXT

Download

Well Known Text as HTML ▶

OGC WKT

ESRI WKT

OGC GML

XML

PROJ.4

Proj4js

GeoServer

MapServer

Mapnik

PostGIS

```
PROJCS["S-JTSK / Krovak East North",
  GEOGCS["S-JTSK",
    DATUM["System_Jednotne_Trigonometricke_Site_Katastralni",
      SPHEROID["Bessel 1841",6377397.155,299.1528128,
        AUTHORITY["EPSG","7004"]],
      TOWGS84[589.76,480.0,0.0,0],
      AUTHORITY["EPSG","6156"]],
    PRIMEM["Greenwich",0,
      AUTHORITY["EPSG","8901"]],
    UNIT["degree",0.0174532925199433,
      AUTHORITY["EPSG","9122"]],
    AUTHORITY["EPSG","4156"]],
  PROJECTION["Krovak"],
  PARAMETER["latitude_of_center",49.5],
  PARAMETER["longitude_of_center",24.83333333333333],
  PARAMETER["azimuth",30.28813972222222],
  PARAMETER["pseudo_standard_parallel_1",78.5],
  PARAMETER["scale_factor",0.9999],
  PARAMETER["false_easting",0],
  PARAMETER["false_northing",0],
  UNIT["metre",1,
    AUTHORITY["EPSG","9001"]],
  AXIS["X",EAST],
  AXIS["Y",NORTH],
  AUTHORITY["EPSG","5514"]]
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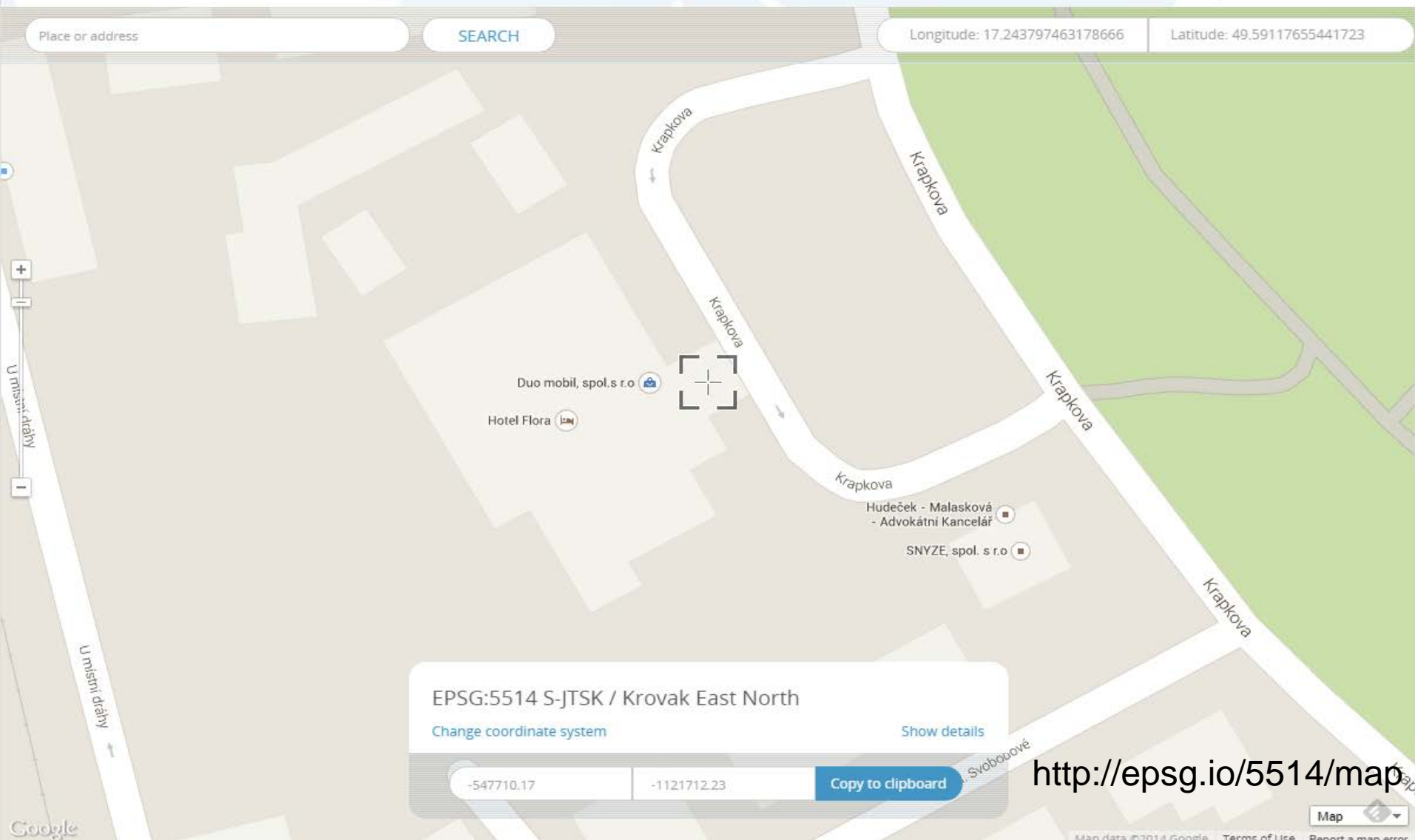
<http://epsg.io/5514>

Place or address

SEARCH

Longitude: 17.243797463178666

Latitude: 49.59117655441723



<http://epsg.io/5514/map>





INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

DĚKUJI

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